

Brasil 1976

3°

29c



NOTE BOOK

75 SHEETS

No. KB-3387

No. KB-3388

TOP OPEN
SIDE OPEN

2407. ultimo n° novo.

Bahia - Brasil. 1976
3º safári

K, Mo, NY

May 6, 1976

2408

Atractantha felix

Mun. Esplanade - Km N
of Esplanade city.

Slender bamboo growing
in "cavities". Note tips
reticulate - low trees forest
quite dense and tangled
but not as much as
"cipo" - sandy soil - 3'

Trees + shrubs: *Araceae*
+ *Murto*; *Mithosaceae*.
Impatiens: *Leptocarpus* *bealii*.
These 3 are very common
in the forest.
Also some but few large
bromeliads.

Forming \pm small nodules,
but sometimes
at base or arching or
bending over trees and
reptiles. Hard to see!

Color white with ven-
ular structure. but not
ring of holes.

When exposed below
nodes on lower part
of plant. cylindrical
knobs. ^{trunk} smooth.
Color sheath persistent
until rotten on lower
culms. A little asplous
or pubescent in young
smaller branches.

Blade very narrow, long
reflexed, soon deciduous.
on the \pm long (but not many)

oral uter. In young
shoots rare, with white
hairs uterine.
Edge of sheath overlapping
and standing \pm open.
Drying very often the edge
the base \pm longer or longer
starts separately from
sheath.

Node not prominent
with several prongs
on both of culm
near node.

One main axis, repeats
base, ~~stems~~ roots leaving it
falling or trying to let
see the repeated base.
One or two \rightarrow usually
broken on both sides
there one also separately

leaf blade narrow on
edges and a little also
on sheath. Narrow
leaf + small not
very long, up to 13 or 14
cm long. Sheath of
leaves, thin, translucent.

Old or mature culm,
thin, ± yellow.
All plants but a few
clumps in flower!
Flowers arranged
at end of branch
complete at nodes
long, thick and curved
pseudospike.

Spike: green when fresh
and young, turning a little
dark or greyish dry colour,
none or all? of sheath

of less developed in
pseudospike.

11.50m
2 internodes: .65cm, .68
the longest -
discrete: .8mm - 7,
less than 1cm -
3 on them seen - dark
violet - 2 stripes? or 3 in
Alt: 120 mm - (110 ~~mm~~)
The morning, 150 in afternoon
Roots with ring of air canals.

not sure of it

Photo B & W vol #53 - (1 to 31)

Ektachrome: vol #54 (1 to - 23+)

FAA: 1 large $\frac{1}{2}$ with apical -

1 with buds, 1: leaves,

1 with roots and culms

Long. 1: large apical -

3: 1 - " " (6 nodes)

culm base, germinates

rhizome collected

living plant. also -

Duplicates

US, Ceflac, Tupa, S.I., Kew,
Leningrad, Paris, Berlin, Canberra
Pretoria, Inst Tokyo, and N. York

2409. *Reddia*
 2410. *Streptopne*
 2411. *Olyra steril.*
 2412. *Lobelia*
 2413. *Atractodes*

Reddia 2409
 May 7, 1972

Men de Eplanada.
 street near Jaquira
 18 km N. of Eplanada city
~~at~~ intersection road with BR101
 on right side of road for N.

Alt. 140 m.

Beautiful tall trees forest
 dense, very dark. on
 sandy soil. This is not
 correct but quite similar
 to mole litterance. Very
 dark inside. Primary
 forest, only few trees
 some trees cut down
 but ~~no~~ no weeds seen.

Abundant and common
throughout the forest.
in some places forming
carpet, the ~~to~~

Most plant rather young,
or ~~is~~ bright green.

Few in some places
very tall with many
old, branched inflorescences.
Most of the plant flowering.
In some places growing
together with *Olyza* sp.
and *Streptopyrum*.

I think this is the
same *Rodinia* I collected
in 1972 in Japaguare.

Photo: B. & W. roll 53 for
32 to end. and roll #55
for 1 to -
(all with flesh)

Electron: roll #54 (for
23 & 24 to end (all with
flesh.))

FRA: 3 (fl. ♀, fl. ♂ and leaves)

Box 1 -

3 : 1 : 1 ♂ in fl. - (5 vials)

May 7.

2410

Streptopogon americanus

Mrs. de Mue (see box.)

Det. 140 mm

In +kuse, Lark, primary
front of sandy soil. &
similar to photo ~~the~~
litorene.

In Lark flows of front
common, more in
smooth slope of 1 creek.
Photo

Photo. B. & W. roll #55, with
on after Roddie (with
plant).

Ekstern - roll 54. (with
plant to end of roll.
only pen.

FAA: 2 vials (inf & long)
Long. 1 "

Duplicates sent to:

S. I., Kew, Kew, Berlin, Paris,
Lentore, Pretoria, Tokyo, N. York.

May 7

2411

Olyra sp. ?
M. S. M.

Alt. 140 m.

^{on forest}
± scarce and very at hand
but here and there
forming small clump
with *Rottelia* and in
places with *Stenopogon*
seems to be *Olyra*, only
2 found in flower
forest.

Very striking \neq of leaf
at plant in sand

fls. There forming
proton from leafy
a large or quite deep
leaf complement the
type of delicate, narrow
leaves, and next to
them other of
much larger and
very asymmetric base leaves
and widely open on
culm.

FDA only leaves -
no photo -

May 7

2412

Fernandus ornamentalis
(Schrad. & Schults) Hitchc. & Thos.
Mun. Muna, Det M. T. Hales

140 m. alt.

Quite common on primary
forest, + abundant on
edge of trail or
forest.

Growing with *Proelia*
of C.

No photo - FRA: 1 vol
+ fl. & leaf.

K

May 7

2413

Atractantha petiolo?

Mun. de Esplanada?, 14 Km
N of Entre Rios, on
road (highway) intersecting BR 101
across from Fazenda
Lapoa for Prata

Abundant on dense
forest of low trees
or tall savanna type
Flowering profusely

Photo: few B & W - roll # 55

May 9, 1976

2414

Panicum?

Men de Mucage', 26 Km S of
Andaraí. on road to Mucage
city

Alt. 1050 m

Infrequent on rocks between
mosses with water running
over rocks - Near top of
river

May 9

2415

Velloziaceae Vellozia

Mn. Mucugi, on road from
Andarai - Mucugi - 29 km
S of Andarai -

Alt. 1050 m

leaves in photo of
mountain, (probably top)
soil sandy and rocky
forming dense scrub
clump. Flowers violet
+ deep red color, some
+ stripes bright yellow -

FAA. 1 inch leaves 2
1 flower
no photo

May 9.

2416

Cratogeomys rufescens Schrad. ex Schult.

Mn. to Mucugi - 29 km

S of Andarai on road
Andarai - Mucugi -

Alt. 1050 m

leaves on rocky soil
of top
of mountain

FAA. 1 inch leaves and
spike.

2417

Eragrostis superba Schrad. ex Schult.

See also -

leaves long willows
on road here &
the other (2416).

2418

Palouse

Synagrus

Mt. de Mucage - 2 km
N of Mucage city, on road
Mucage - Andarai -

Alt. 950 m. - 1050 m.

Abundant all over the
mountain, I flower only
on high part, on the
top -

Flowers yellow -
Diplopods, Dactylis, Ispod and
Field Museum -

2419
Velloziaceae *Grammatophyllum*

2 km N of Mucage - on
road Mucage to Andaraí

Alt. 950 m.

Growing on rocks ~~on~~
near the top of ridge
on some ~~area~~ *Orquideae*
Bromelaceae. Palms
Few flowering. Flowers
~~and~~ copper red color.
Sticky leaves

FAA: leaves only.
Rather small plants

2420
Velloziaceae *Vellozia*

to ~~the~~ Mucage
7 km N of Mucage
city on road to Andaraí.

Alt. ~~1025~~ 1025 m.

On ferns Andaraí.

Mucage - common on
flat top of ridge.
Flowers blue-violet
narrow leaves, small
plants

FAA Flower & leaves

2421
Velloziaceae Vellozia

Alt. 1025 m.

Abundant on top of rock
and on ^{lower} slopes ~~on~~
Flowering only in this
part of Andean
On rocky and sandy
area with other
Velloziaceae, Ophiuraceae.
alt - 1000-1500 m. alt.
Flowers large violet blue
(lighter shade than the 2420
(the smaller one)
FAA: leaves

2422
Ophiuraceae

M. de Mucage - 7 Km N
of Mucage

Alt - 1025 m

Common on top of rock
with many Velloziaceae.
Leaves fleshy.
Flowers pink - white.

Ornithoglossaceae

2423

Flowers yellow-green
claw - magenta, with
redish - In flower.
pendulous - Not as
common as the other one.
2422.

Velloziaceae

2424

Mr. de Muenzi - 7 Km N of
Muenzi on road to
Andarari

Alt. 1025 m.

Common on rocky top
of reserve along with
many other Velloziaceae
& some not collected
no flowers. ~~rocky soil~~
~~rocky soil~~. On rocks
with little soil
Partial flowers - only
4 collected -
FPA - leaves -
leaves & sticky, purple

2419

Panicum cumbucana Rev. !

2425

Panicum leucoblepharis
det. R. Pohl.

Mon de Mucunze

Common on rocky soil of
top of sierra, growing in
small patches under
Velloziaceae & other plants.

Panicum rectissimum Mey

May 11

2426

Panicum (small sp.)

Mon de Rio Andaraí - rio
Correio Fundo, ± 15 km
NW of Andaraí city
(river, up in the mountains
in a valley, on Serra
to Sincora).

Alt = 475 m.

Common in rocky soil
near stream & under
other small plants.
FRAH

FRAH : 1 nat with
leaves & spikelets -
no photo.

May 11

2427

Palm

Geonoma brevispata Barb. Rodr.
Mun. de Andaraí - Serra
do Sincora, rio Corrego
Fundo, ca. 15 km N.W.
of Andaraí city

Alt. 475 m.

Growing only at edge
of river, near note-
gate, upstream, in
a small rocky valley.
Small palm, up to
1.50 m. Petiole with
flowers (yellow?) and
fruits.

Common name: Jusara
no foto, no P&A -

2428

fruticose.

Mun. de Andaraí, Serra
do Sincora, rio Corrego
Fundo, ca. 15 km N.W.
of Andaraí city.

(part by ~~drift~~ car to the
end of road, then \pm 3
hours walking.)

Common up in the
slopes and near
river.

Alt. 475 m.

forming thick, big
clumps. ~~It~~ on rocky
slopes - We also saw it

on higher slopes.

On this slope and also on top of other part of terr. to line between Andarai and Mucaye - we did not see any bamboo or bambusoid grass.

About are many sps of Velloziaceae small, reddish, but some of them the stems could be taken as a "small bamboo".

Also of very common is a tall, pretty Cyperaceae - not in this area

also the Gramineae - some are also small. Ongritese, some bromeliads and many, ~~as~~ many beautiful plants almost all in flower.

Velloziaceae alone are more the 6 - at least we collected 5 or 6. But there ~~are~~ were some others & not in flower.

May 11 2429
Otaguites.

Mun. de Andaraí - ferro-
to Sincora - no wire
Fence, ca. 15 Km NW of
Andaraí city -

Alt. 475 m

Forming thick clump
on rocks with dirt
without soil - at
edge of river on
the deep creek -
Flowers small, orange
color -

leaves thick, fleshy -
no pits, no PPA

2431 - *glabro* K, MO, NY, P, LE, B, F, G, W,
2432 - *glabro*

May 12 2430

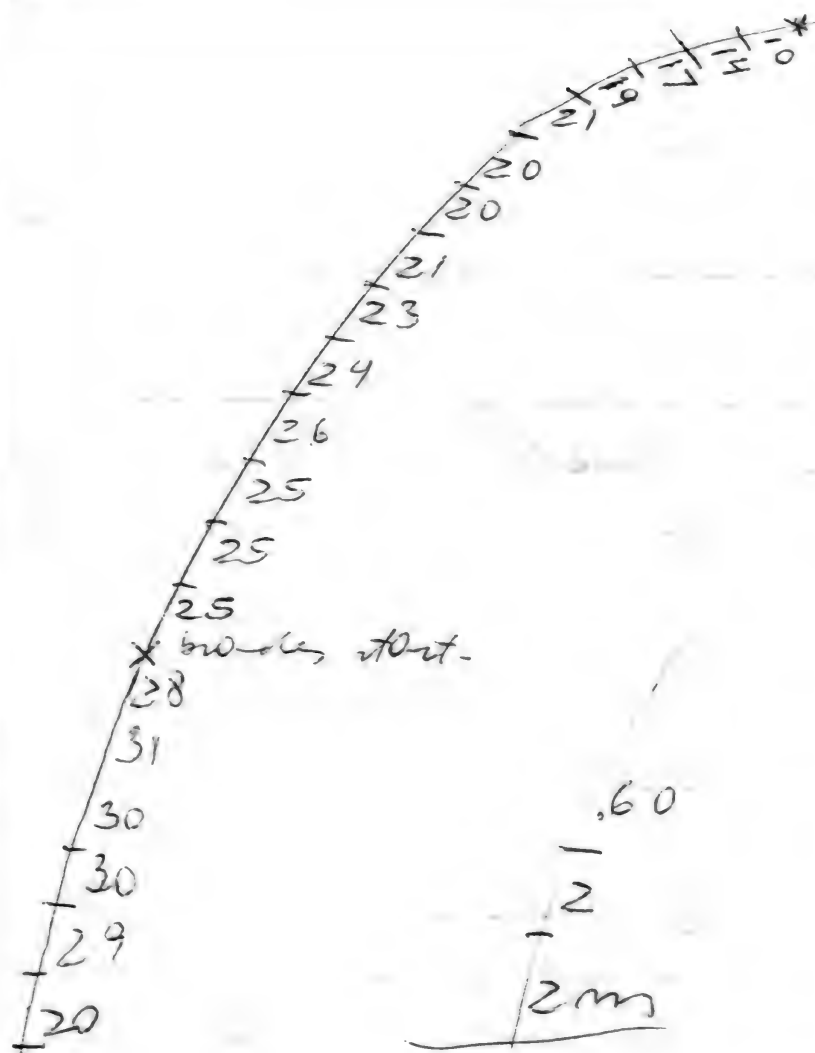
Tacuara reticulata.

Mun. de Andaraí, strada
para Itaité, 11 Km S of
Andaraí city.

Alt. 500 m. s. m.

Photo: B & W - roll 55 (± 2-3 up
to 31 passage verso linear, white
eyes, con fillos coloring -)
from 31 to end. roll 57
from 1 to

Exhibition: Roll 56 (from 1 to 5
passage verso linear, white
eyes & pic) Tacuara from 6 to end.



up to 4.60 m. one looking
very tall.
stems 1.4 cm - 0.8 cm

culm piece collected
parrachids collected
rhizome collected
living plant collected -

FAA: 4 rats:

leaves from top - base
from apical bud comple-
ment. bud complements;
culm pieces -

Abundant in the
area and from ...
the from ...
as on the road and
in "Jesno".

Growing in low trees
formation, ± like a
dense carpet or a
low forest. It is tall.

and more dense than
the ecotone ~~part~~
It is not a ~~moor~~
type either, ~~there are~~
no so many ~~stems~~
and not very big
branches and big
leaves. Probably a
transitional forest between
the ~~very~~ ecotone of
the lower part and
the region of higher
altitude.

Moist. \pm sandy soil
and ~~no~~ moderate
slope but very smooth
slope.

Very abundant, forming
thick clumps mixed
with trees and

shrubs, few herbaceous
plant seen, very dry
type of forest. But
very ~~very~~ very happy and
green.

~~Very~~ Small bamboo
up to 4.60m high.
At forest the bamboo
exhibit mostly the
full branched form
as a regular ~~kind~~
clump. Few clumps seen
in other part of the
wood where still remain
a few old culms of
the unbranched type
the one used to make
fences.

Bamboo start growing
 \pm pretty high, in the

one measure at 1.60mm
but from green to very green
and smooth all the
way, light green
to dark green, and
mottled with ~~very~~ ^{apex}
cores by a sort of wax
only green slightly
when cut with
shears, falling like
talcum.

Diameters 0.8-1.4mm
or less. solid, with
very thick, very hard
outer part and center
filled with loose

pith. white, [±] soft, ~~can~~
can be separated with
nail
but sheath ~~on~~

very smooth during
very soon and falling
soon. Only seen of
new culms, slender
long, light large color
and with sides open
black broad lanceolate
perforate to sheath
or slightly reflexed or
slightly cup. Only
on few terminal
ones it is \pm erect.
Outer nodes \pm united
forming a band, only
on top of edge
sheath very hard, opaque
outside, light inside.
Part of the culm
with all the bark
completely stripped

with round, small
leaves. Bud indig
in ~~1~~ ~~leaf~~ ~~leaf~~ complement
of leaves, white leaves
also very hard,
at least under the
small ones

Node with not
prominent ridge
± dark band on
node.

Bud complement.
Herbert's style, only
with round to
very bud with
round green the ones
on lower part of
culm with several
buds. One ± large
prophyll for all.

Nodes very close together
short internodes.
Specially the top of
culm where internodes
are very short. ± 2-3
very short.

Culm with full developing
leaves ^{just when small} and
growing over repeatedly.
In some places large
mass about half of
so - so - brown on
the same part a
small palm, called
"coco de banana".

Ischnanthus bambusiflorus (Trin.)
Soll. - det. M. T. Hieser.

May 12

2431

Ischnanthus ?

filose

Mun. de Andarari, estrada
para Itaité, 11 Km S of
Andarari city

Alt. 500 m

In dense cerrado or
low forest with Tacu-
sa verticillate as domi-
nant - In remnant
flora under the bamboo
sheath and leaves
long hirsute.
Large terminal inflo-
rescences. Plants up to
3 m tall -

no photo -

FAA: 2 vials one flower
one leaf

Det. M. T. Hickey -

May 12

2432

Lobelia bambusaeflora (Trin.)
Mun. de Andaraí, estrada
para Itaité, 11 km S
of Andaraí city

In dense cerrado or low
tree forest with
bamboo (*Tecoma verticillata* as dominant)
Under or mixed with
~~other~~ ~~plant~~ on the sam-
boo and other plant
In semi-shaded place
growing near the
paved road. Fruit the
same?

F.A.A. 1 not seen a
flower -

K, MO, NY, P, LE, B, F

2433

Bambusa (Guadua)

Município de Andaraí -
estrada para Itaité
km S of Andaraí
city

Alt. 360 m.

A more or less small
patch of Guadua
in rather tall dense
and dry forest or
tall cerrado forest
with sandy soil.
~~Form~~ and looks
Form a ± dense clump
with culms rather
close to each other

Stem up to 2.5m
in diameter, with
thick walls.

As ± flat on little
separations on side of
main branch.

Surface smooth,
green, with some
white patches or lines
on main stem.

Leaf sheath falling
very soon. Dry

leaf beige or yellow
with long, big, slender
triangular, withering
leaf sheath without
separation. A line
or separation between
them, sometimes
black full first, (it's

a line of separation.

On thinner & when

or higher up in
plant 2 nodal
ridges marked.

On lower part no,
typical gradation with
base of lower

branches full of
spines, 3 per node

On lower $\frac{1}{3}$ branches
are not developed

but only thick
hooks or spines.

Leaves narrow, not
rather small, scabrous
on edges.

(but sheath very smooth)

On main branch

per node and one

Stems, rather short, to get
28 cm.

Spine or branch on
sides.

On higher branches
no spines.

They say this name
of yucca not now
abundant in some
other places not
far or within the
region.

Photo. B & W. end of
roll 57 & 58 (from 1 to
Exts: roll 58 (from 1 to
 $1\frac{1}{2} \pm 17$).

FAA: 2 rays: leaves &
buds. [also pieces
and fragments]

2434

Aristida longifolia Trin.

Alt. 3600 m.

growing on dry sandy
cavities on foot of
mountain, along
trail and rather
disturbed places.

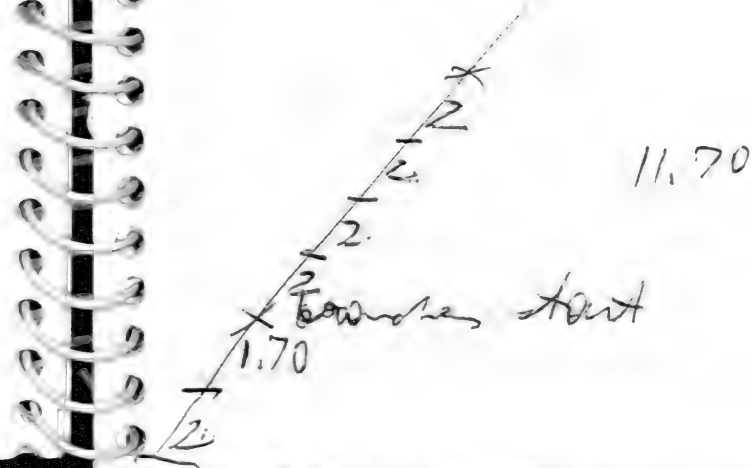
FAA: 1 incl in fl.
leaves -
no photo.

May 13, 1976
Merostachys

2435

Mun. de Andaraí, Serra do
Sincora, estrada Mucuri -
Itaeté, 27 Km from Andaraí -

Alt.: 800 m.



78 cm, 67, 62 cm. internodes.

1.5-2 cm.

Robust plant, forming
dense, big clumps arising
with the tree, of forest
under forest they being
high up. and reaching
over trees.

Difficult to measure one
full plant. 12-15 m +
m. high.

Internodes long. from
62 to 80 cm \pm long.
hollow but thick
walls.

Mature parts on
lower to mid part
surface smooth, shiny.

Mid culm and upper
parts of culms ^{usually}
appressed, "ligo." on
upper part of inter-
node, from $\frac{1}{2}$ to
~~1~~ below the node.
Node without thick ^{skin}
ring but base of
sheath remains attached
to node.

Culm green, on upper
part of internode
mottled green, becoming
a little yellow at
full maturity or light
green.

And complement in
typical sheath fashion
from very young
with many branches

in two or 3 rows -
In full developed
plants we count up
to 94 branches -
when developing from
buds cover by several
short bracts at base.
Branches quite thick
but sheaths thick
green and striate, long
large scales, brownish-
red on lower
part especially when
young having white
flats and thick base;
bright inside -
Blade broad lanceolate
acute reflexed
folding when dry.

leaf complete quite
large - leaves, especially
on edges. ± broad
medium size - large -
And also in young
leaf early, dark
copper color - The
same on older
leaf - but longer -
Plants are quite
more erect than
other Mercurialis.
at least erect for
8 in or so - stop
growing in ± dense forest
of transition type? On
lower slopes of mountain
near or ± not far
from river, There are
the slopes of a white rocky

FAA: 2 nels, 1 reg white
with bent, 1 bare -
rhizome colored
javanese & culm base
living plant - colored
plots 1/2 W - ± 10 of well
58 and well 60 (1 to
(with flower mostly)
Ektowr - well 59 for 15 \pm
to end, with flower
mostly.

Actinocladum

May 13, 1976

2436

Tanaro sedillole

Mun. de Itate - Fajardo.

Salubim, on shore

Andarai - Itate - (on

low slopes of river

to El Limón -

(~~distance~~ Itate to Fajardo is 30 km

26 km SE of Andarai of

Alt. 600 m -

n. v. "tanaro" -

* J. J. V. "tanaro" -

~~Wag. Akshara~~
FAA: leaves 2 inch large &
well. Suck 1 inch -
also 1 inch. (4 inch)
germinated, also 1 inch
rhizome collected.
Living plant collected

Photo: B & W. roll 60 - 1st
10 & 15 - and roll # 62
1 to 20 etc.

~~Wag. Akshara~~ Kodachrome
roll # 61 (Vick #)

Very abundant, both
form, but in the
area especially the
low, young & form.
Form thick, large
clump of short form
mixed with many,
many new shoots
coming up from
the thick clump.
New also usually
short, some up to
2 m. (few), usually
1 m. 1/20 ±
leaves - form not
very erect, up to
1 m or a little
more.

Broad leaves beautiful
in large leafy clump.

not coming
freely put down
The stalk of the
one thin but with
nodes & internodes
some of them
specially those below
the leaf complex
start growing. A lot
of these nodes were
buds, very small.
Leaf thick, turf-
with \pm minute
with oral setae.
Color of leaves ash
blue green -
New culm covers
with the turf, almost
hanging culm sheath
pushed away for the
turf

Declopping buds.
Sheath smooth, like
glabrous, hard, white
budding - with black
broad triangular
horizontal to the little
exit or cross depression
like Stratiotocle $\square \square \square$
Black extremely
distinctive.
Most of the buds
growing. Stem, already
with small bristles
like a Pseudotsuga.
In those P. or even in
young new culm
the top of culm with
a bunch of 1 to deep-
complex of \pm large
leaves.

Buds start developing
from top to bottom.
Base of developing
branches or buds covered
by thick, stiff, smooth
much more than
any Monticola -

New buds on
wattle giving normal
small narrow long
cylinders smooth, flattened
over by white wax
near base when cut
buds solid, thick
in all filled with \pm
soft to medium with
few new calyx very
thick \pm hollow -
base of new form (buds)
with burned pieces

of calyx. The new
one coming around
them felt just in
a shape, mostly
giving long stalks with
big leaf, some short
giving small, narrow
leaves. (so they give
note?) -

Near to this cluster
or nearly up full
buds and base
~~normal~~ cluster of
normal form. Older
flower with branches
complete of
many branches -
This tree is in a
relatively more humid
slope, but cut and

with 2nd growth.
+ low trees and
shrubs or open
place.

Actually this low (body)
forms are not
culms but branches
growing erect and
elongated looking
like culms. The
main culm burn
and rotund ones
growing up. Later
the rhizome (not
basal buds) with
give the thick, new
culms. In this case
rhizome both are produced
for the rhizome -
by.

May 15, 1976

2437

Ficus ~~the~~ hirtus (Rodd.) Rose
Mm. Tap Japaguara,
Br 116. Km ^N de
Jequie, Mato de Cipo

In mato de cipo
transitional type of
forest between catinga
and humid upland.
Not common in
the harsh places of
forest, at forest
very dry.

[leaf ^{nodes} are not as densely pubescent
as on typical specimens)
consist of M.T. Hickey.

KAO, IV. X. 1976

May 15
Brodiaea

2438

Mm. de Japaguara,
rodoria Br 116, 42⁺
Km N of Jequie.

Very abundant in
mato de cipo, at
forest very dry.
Dense transitional
forest at edge of
catinga region.
tall trees with many
branches on cipo and
big, terrestrial Brodiaea
flowers all over, but
not near the
edge of forest. Very
red sep inside, not

no abundant and not
flaring -

Tall, the sprouts from
80 cm or so more.
high. Spel of flower
V of both sexes -
scales on leaves and
and part of top
on 1/3 up σ in
parallel. No relation
apparently between
more production
of σ and age of
plant. I saw the
in small young plant
and tall adult
plant. Presumably is
the present condition
at the time for this
kind of flower. Both

are abundant. Many
of age with thick
out no tip beautiful.
leaves = large, oval
smooth, glabrous or
looking so. Thick
base of plant
many clumps with
rooted meadow weed
above ground.
In disturbed area
growing happily -
looks like the
same sp. of E. plant.

FRA: 1 incl. σ & ϕ sp. l.
1 incl. leaf & roots
Bag - 1 v. with 100 sp.
3:1 - σ sp. l. (4 incl.)
trip part collected

Photo G x W. roll 62
1 ~~to~~ from 16020 to
end and 64 from
to 16

Entero : roll # 63
(from 1 to 15 on 16)

May 16 2439
Bambusa (Guadalupe)

Man. Jaque', Km ~~10~~
East of Jaque city on road
to Tijuana.

Alt. ~~125~~ 125 to 175 m.

Very abundant on
good tall forest on
a slope of hill.
Mixed with very tall
trees. Robust, huge
bamboos, 20 m or
more.

Leaves erect for more
than 8 m, then
bend and drooping

with handle.
Diameter 7-8 cm or
more. Culm hollow
thick walls. Leaf
green, young covered by
white hairs.

Nodal ring with
2 ridges, white band
between them, (not
very prominent or
flattening the upper
ridge).

Culm sheath very
big, wide in the
very short, triangular
blade covering the
sheath. Sheath thick
tuff covered by fine
dark hairs. Falling
soon.

One main bud and
small x node,
On lower part, 1 of
budling, broader than
by spine, 3 x node.
Rhizome with
1 thick budling
one bud on a side
and soon above or
spine or another
bud. Each one
with one spine on
each side -
leaf complement
very big, with many
leaves.
Blade, blade type
very large, broad leaves.
white. They roll up
very soon after

cutting the branches
white and red.

Center with water
inside -

Branches (100s) ridged
several meters, deep
trees, climbing, 5m
or more high -

Very pretty. Bamboo
growing in large
clumps, not very
dense, (I can walk
between the clumps)
New shoot going
out several meters
high.

Garments collected
also here.

FAA: 2 nals, one with
back and 1 with legs

Plots: B, W. roll # 64

from 16 to end -

E. H. L. roll # 63

from 15 to 16 to end -

May 12

2440

Ischnanthus lancifolius
var. *weberbaueri* (Mey) Hitchc.

Monte Jequie, Km
E of Jequie city on
road to Ipiaú

Alt. 175m.

Abundant in forest
in dark place. Tall
trees and huge grass
forest. Humid type
of forest.

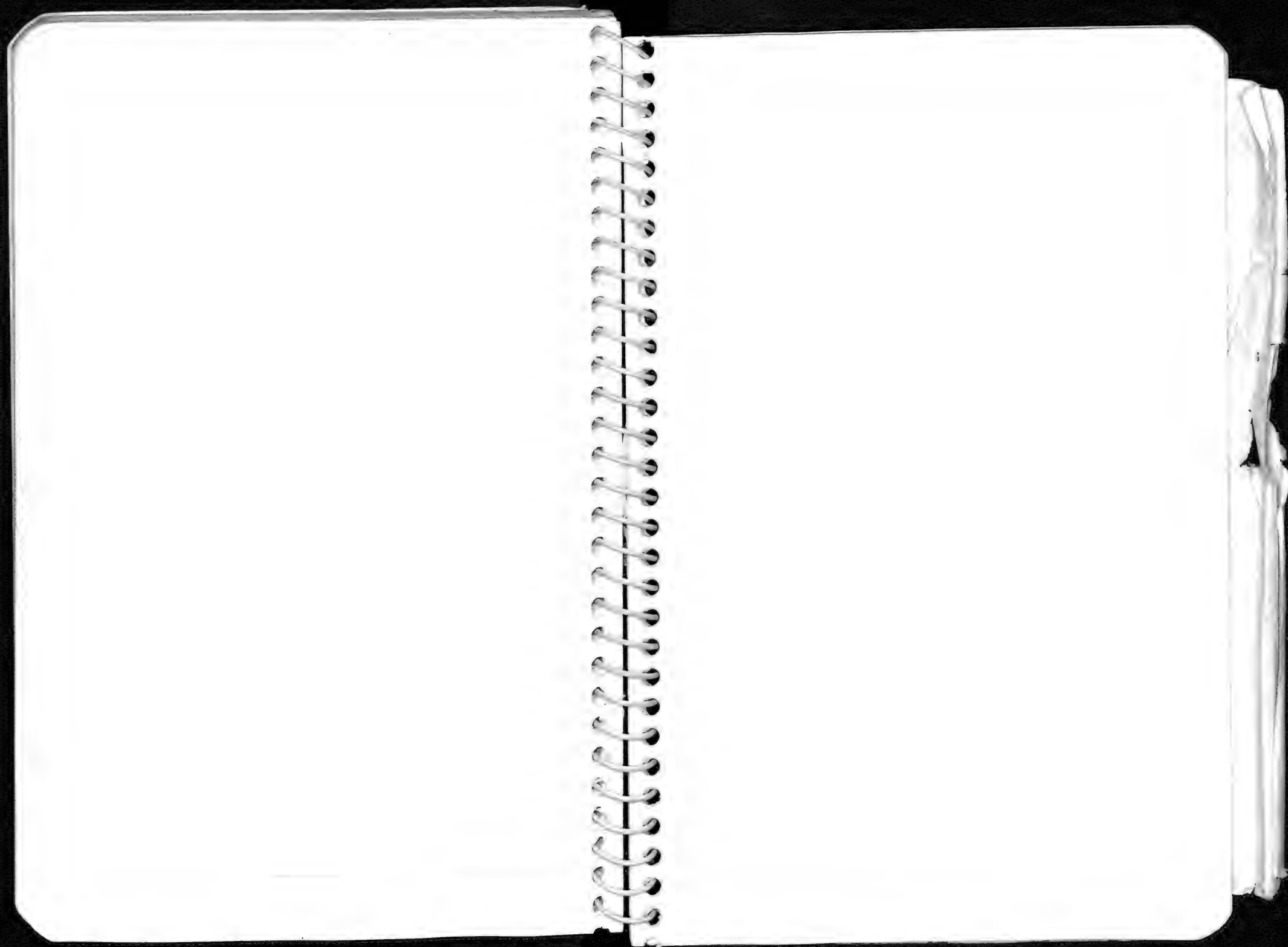
Forming dense cover
of all but pure forest.
No one with flowers.
Only few just infl.
FRA: leaves - no photo

JB6E

At. Linquaticus 722

2nd ed 6054

North Western station:
Hulaville (Preparanda)
2nd 1100 and 1100, the other
1100 -
Biological Station



Handwritten notes in a cursive script, likely a form of shorthand or a specific dialect. The text is written on lined paper and appears to be a continuous paragraph.

Handwritten notes in a cursive script, continuing the text from the previous block. The handwriting is consistent and fluid.

NICOLY 10/29/64
Handwritten notes in a cursive script, including a date and possibly a name or title. The text is written on lined paper and appears to be a continuous paragraph.

Handwritten notes in a cursive script, continuing the text from the previous block. The handwriting is consistent and fluid.

Dr.

Tomlinson

Fairchild Botanical Garden

Old Cutler Road

Miami Florida

Estamos interesados en un informe sobre la anatomía y morfología de la raíz de las palmeas, específicamente si presenta pelos radicales, para la absorción de Agua y minerales; y en caso negativo que partes, y como la raíz cumple esta función.

Esta información la solicitamos estudiantes de Agronomía de la facultad de Ciencias Agrícolas ^{de Palmira} de la Universidad Nacional de Colombia Sur América, que adelantamos estudio sobre la palma de Chontaduro *Bactris gasipaes* H.B.K. y por referencia al Dr. Richard Pohl. Esperamos establecer como precedencia con Ud. ~~al ser~~ por ser especialista a nivel Internacional.

Cordialmente.

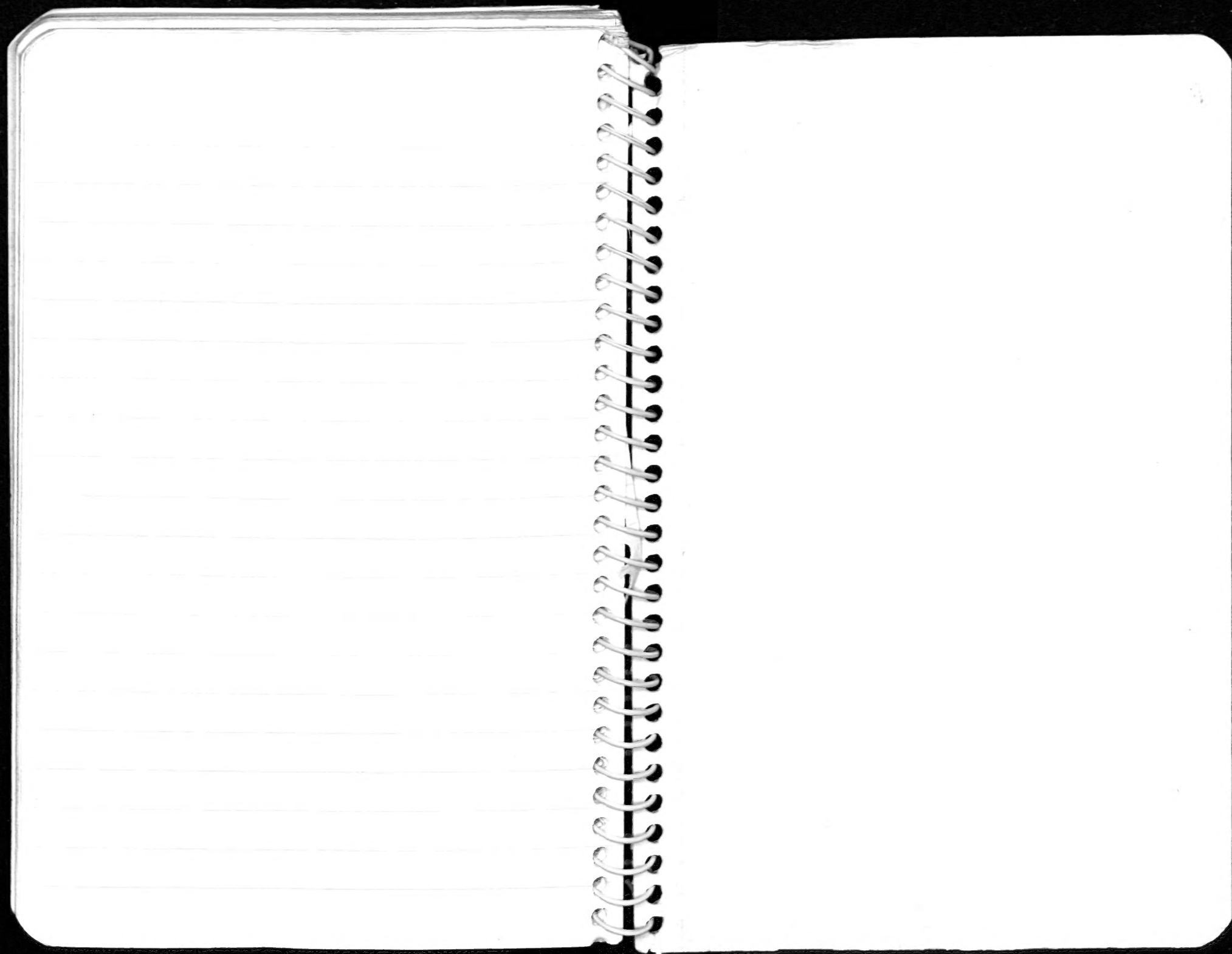
Fausto Parra

Eduardo Cortijo

gabriel de la cruz

Alvaro González

P.D. c/3. información favor enviarla al apartado correo 443 de la ciudad de Palmira (Vallé), Colombia Sur América.



IN-PA

IN-PA

MADE IN JAPAN